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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
SCHWARTZ, JORDAN MARC	
ART UNIT	PAPER NUMBER
2873	

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/626,973	BLUM ET AL.	
	Examiner	Art Unit	
	Jordan M. Schwartz	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/30/04 (Election)*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12,16-36 and 59-95* is/are pending in the application.

4a) Of the above claim(s) *16-36,60-70,86-88 and 91-95* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12,59,71-85,89 and 90* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/10/04,7/7/04,4/15/04, 2/13/04*
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *Foreign References*

DETAILED ACTION

Election/Restrictions

Applicant's election of Group Ia, claims 1-12, 59, 71-85, and 89-90 in the Election received June 30, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Information Disclosure Statement

For applicant's information, in the IDS submitted February 13, 2004, the cited reference JP-10366043 was corrected to state JP-11352445. Specifically, applicant inadvertently listed the application number of the reference instead of the patent number.

The information disclosure statement filed in this case fails to comply with 37 CFR § 1.56(b), which states that information is material to patentablility which is **NOT CUMULATIVE** to information...being made of record in the application. Specifically, applicant has cited thirteen pages of references for consideration and additionally has cited an entire magazine (Eye Care Business) without setting forth relevant pages within. The examiner believes that the thick stack of references for consideration is largely cumulative and, therefore, based upon the large number of references cited, the initialed references have been considered in a cumulative manner.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

Claims 1-2, 7, 10, 59, 71, 78, 81, 85, 89, and 90 (and dependent claims 3-9, 11-12, 72-77, 79-80, 82-84) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, in reference to claims 1-2, 7, 10, 59, 71, 78, 81, 85, 89, and 90, applicant uses the terms "conventional refractive error" and non-conventional refractive error" (and "unconventional error") and the intended meaning of these terms is unclear rendering these claims vague and indefinite. Specifically, reading these claims in light of the specification, in paragraph 0040 of the specification, applicant states that "conventional refractive error can include myopia, hyperopia, astigmatism and/or presbyopia" and that "non-conventional refractive error can include irregular astigmatism, aberrations of the ocular system, and any other refractive error not included in conventional refractive error". By the use of the terms "can include" it is therefore not clear as to what is considered "conventional refractive error" and "non-conventional refractive error" and the lack of clarity renders the claims vague and indefinite. It is further not clear if applicant is intending to provide a special definition of these terms. For purposes of examination it is assumed that applicant is attempting to provide a

special definition of these terms and the assumed meaning within paragraph 0040 is "conventional refractive error is defined herein as myopia, hyperopia, astigmatism and/or presbyopia" and "non-conventional refractive error is defined herein as irregular astigmatism, aberrations of the ocular system, and any other refractive error not included in conventional refractive error". Furthermore, in claim 10, applicant uses the term "unconventional refractive error" and it is not clear if the intended meaning was "non-conventional refractive error" (the assumed meaning) of if some other meaning was intended. Further clarity is required.

With reference to claims 71 and 89, that part of the claim stating "to provide for the highest level of vision correction for the wearer" renders the claims vague and indefinite. It is not clear if the intended meaning is the "highest level of vision correction for the wearer within the vision correction area" (the assumed meaning), the "highest level of vision correction for the wearer within the spectacle lens", if applicant means a higher level of vision correction for the wearer relative to the second region, or if some other meaning is intended and the lack of clarity renders the claims vague and indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8, 10-12, 59, 71-79, 81-85, 89-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Profile, Indiana Journal of Optometry, Vol 2, No. 1, pages 5-10, herein referred to as "Profile".

Profile discloses the limitations therein including the following: a spectacle lens (page 6, second column to page 7, first column). Spectacle lenses will inherently comprise a front surface, a back surface, and a peripheral edge. "Profile" further discloses a vision correction area having a refractive error correction (page 8, second column, re the "sphero-cylindrical refractive error correction and the higher order aberrations correction); the refractive error correction based on a lens prescription determined by a wave front analysis of a wearer's eye (page 6, second paragraph to page 7, first paragraph, page 8 second column); and the vision correcting area correcting non-conventional refractive error (as this term is understood) to provide at least a part of the wearer's vision correction (page 8, second column re "higher order aberrations").

Profile discloses as is set forth above but does not specifically disclose the peripheral edge capable of being modified to fit within an eyeglass frame. However, it is inherent that the peripheral edge would be capable of being modified to fit within an eyeglass frame, this being reasonably based upon "Profile" disclosing the lens for use in eyeglasses (Pages 6-8). Regardless, "Profile" teaches that the lens can be in the form of a "hybrid lens" being made from ordinary glass (page 8, second column). The examiner takes Judicial Notice that it is well known in the art of eyeglass lenses for glass lenses to have peripheral edges that are capable of being modified, such as by well known

grinding techniques, for the purpose of having the lens properly fit within the eyeglass frame. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the peripheral edge of "Profile" capable of being modified to fit within an eyeglass frame since "Profile" teaches that the lens can be in the form of a "hybrid lens" being made from ordinary glass, and it is well known in the art of eyeglass lenses for glass lenses to have peripheral edges that are capable of being modified, such as by well known grinding techniques, for the purpose of having the lens properly fit within the eyeglass frame.

"Profile" further discloses that the vision correction area can correct for conventional refractive error (as this term is understood re page 8, second column re "hybrid lens" and correcting "sphero-cylindrical refractive error" or "correcting presbyopia"); that the lens can correct for aberrations of the lens (Page 8, second column); that the lens can have a material having a variable index of refraction and a modifiable index of refraction (pages 6-8 re the liquid crystal lenses). With respect to claim 6, "Profile" discloses the lens as an eyeglass lens but does not specifically disclose the back surface as concave. However, the examiner takes Judicial Notice that it is well known in the art of eyeglass lenses for the back surfaces to be either convex or concave depending upon the desired type of optical correction. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the back surface of the eyeglass lens of "Profile" as concave since it is well known in the art of eyeglass lenses for the back surfaces to be either convex

or concave depending upon the desired type of optical correction. "Profile further discloses) the lens providing a prismatic power (page 7, first column); the correction of unconventional refractive error provided by localized changes in a refractive power of the lens (pages 6-7 re the liquid crystal lenses with an array of cells that are "individually addressed"); the lens correcting to better than 20/20 vision (page 8, second column). With respect to claim 12, "Profile" does not specifically disclose the lens correcting vision to better than 20/10. However, "Profile teaches that the correction of high order aberrations "can increase visual acuity" and "perhaps beyond the typical limit of 20/15". Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the lenses of "Profile" as correcting to better than 20/10 since "Profile" teaches that the correction of high order aberrations can increase visual acuity perhaps beyond the typical limit of 20/15 for the purpose of providing improved visual performance. "Profile" further discloses the non-conventional refractive error correction being different in different regions of the vision correcting area (pages 6-7 re the array of cells that can be "individually addressed"). With respect to claim 71, "Profile" discloses the first region utilizing a prescription determined in part from a wavefront analysis (page 8 second column); a first region correcting for both non-conventional and conventional refractive error (pages 6-8 re the liquid crystal portion as the first region correcting for non-conventional refractive error re "correcting for higher order aberrations" and correcting for conventional refractive error re "correcting for presbyopia"); a second region correcting for refractive error (page 8, second

column re the glass portion of the "hybrid lens" as the second region and correcting for "sphero-cylindrical refractive error); the first portion providing for the highest level of correction within the lens (page 8 re by correcting for high order aberrations it will inherently provide for the highest level within the vision correcting area); and a second region that provides a lesser level of correction than that of the first region (page 8, second column re the glass portion of the hybrid lens that provides for just sphero-cylindrical correction will provide for lesser correction then the first region which corrects for higher order aberrations). "Profile" further discloses the vision correction area correcting for one of distance, intermediate or near vision (pages 6-8 re correcting for presbyopia and providing sphero-cylindrical correction); and the lens as an electro-active lens (pages 6-8).

Claims 1-3, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 92/01417.

WO 92/01417 discloses the limitations therein including the following: a spectacle lens (page 8, lines 30-35, page 33, lines 29-35). Spectacle lenses will inherently comprise a front surface, a back surface, and a peripheral edge. WO 92/01417 further discloses a vision correction area having a refractive error correction (page 7, line 3 to page 9, line 2, page 33, lines 29-35); the refractive error correction based on a lens prescription determined by a wave front analysis of a wearer's eye ((page 7, line 3 to page 9, line 2, page 33, lines 29-35); and the vision correcting area correcting non-conventional refractive error (as this term is understood) to provide at least a part of the wearer's vision correction (page 7,

line 3 to page 9, line 2, page 10, lines 20-30, page 24, line 15 to page 25, line 30).

WO 92/01417 discloses as is set forth above but does not specifically disclose the peripheral edge capable of being modified to fit within an eyeglass frame. However, the examiner takes Judicial Notice that it is well known in the art of eyeglass lenses for such lenses to be made from glass or plastic having peripheral edges that are capable of being modified, such as by well known grinding techniques, for the purpose of having the lens properly fit within the eyeglass frame. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the peripheral edge of WO 92/01417 capable of being modified to fit within an eyeglass frame it is well known in the art of eyeglass lenses for such lenses to be made from glass or plastic having peripheral edges that are capable of being modified, such as by well known grinding techniques, for the purpose of having the lens properly fit within the eyeglass frame. WO 92/01417 further discloses the correcting area correcting for conventional refractive error (page 33, lines 15-35 re provide "refractive correction" and providing "the spectacle lens prescriptions" which will inherently correct for myopia, hyperopia etc depending upon the user's needs); the vision correcting area correcting for an aberration of the lens (page 10, lines 20-30). The lens of WO 92/01417 will inherently correct to better than 20/20 vision since it is being disclosed as correcting for higher order aberrations (page 10, lines 20-30, page 24, line 30 to page 25, line 30).

Claims 9 and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Profile in view of Perrott et al publication number 2002/0149739.

Profile discloses as is set forth above but does not specifically disclose the lens having a chromic characteristic. Perrott et al teaches that in eyeglass lenses it is desirable to further include "standard additional coatings to the front or back surface including electrochromic coatings" (paragraph 217) and/or to impart the eyeglass lens with photochromic or thermochromic properties (paragraphs 216 and 221) for the purpose of providing the desired optical properties to the lens. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the eyeglass lens of Profile as further including a chromic characteristic since Perrott et al teaches that in eyeglass lenses it is desirable to further include electrochromic, photochromic or thermochromic properties for the purpose of providing the desired optical properties to the lens.

Prior Art Citations

Frey et al patent number 6,271,915, Horwitz patent number 5,963,300, and PCT WO 99/27334 are being cited herein to show spectacle lenses that would have either read on or made obvious a number of the above rejections, however, such rejections would have been repetitive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan M. Schwartz whose telephone number

is (571) 272-2337. The examiner can normally be reached on Monday to Friday (8:00-5:30), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached at (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jordan M. Schwartz
Primary Examiner
Art Unit 2873
September 1, 2004